MEDICAL PROCEEDINGS

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EDITORIAL · REDAKSIONEEL

A SOUTH AFRICAN MUSEUM OF THE HISTORY OF MEDICINE

Under the inspiring stimulus of Dr. Cyril Adler (of Johannesburg), who instigated and was the architect of the project, the Witwatersrand University Medical Graduates Association decided to sponsor the establishment of a Museum of the History of Medicine. The proposal was formally adopted in June 1960; since then a distinguished list of patrons* has agreed to support the undertaking.

It is proposed to collect and preserve in this national Museum, for permanent record, all material which illustrates the history of medicine in general and its development in South Africa in particular.

* *Patrons*:
His Worship the Mayor of Johannesburg.
University of the Witwatersrand:
Vice-Chancellor and Principal.
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Director of Hospital Services, Transvaal Provincial Administration.

'N SUID-AFRIKAANSE MUSEUM VAN DIE GESKIEDENIS VAN DIE GENEESKUNDE

Onder die besielende leiding van dr. Cyril Adler (van Johannesburg) wat die skema van stapel gestuur het en dus as die argitek daarvan beskou kan word, het die Vereniging van Mediese Gegradueerdes van die Universiteit van die Witwatersrand besluit om hom te beywer vir die totstandbrenging van 'n Museum van die Geskiedenis van die Geneeskunde. Die voorstel is formeel in Junie 1960 aanvaar, en sedertdien het 'n gedistingeerde lys van beskermhere* ingewillig om hul steun aan die onderneming toe te sê.

Daar word voorgestel om alle materiaal wat betrekking het op die geskiedenis van die

* *Beskermhere*:
Die Edelagbare Burgemeester van Johannesburg.
Universiteit van die Witwatersrand:
Die Vise-Kanselier en Prinsipaal.
Die Voorsitter van die Raad.
Die President van die Konvokasie.
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Die President, Vereniging van Mediese Gegradueerdes.
Die President, S.A. Geneeskundige en Tandheelkundige Raad.
Maj.-genl. A. J. Orenstein, *C.B., C.M.G., C.B.E.*
Die President, Geneeskundige Vereniging van Suid-Afrika (Tak Suid-Transvaal).
Die President, Tandheelkundige Vereniging van Suid-Afrika (Tak Suid-Transvaal).
Die Direkteur van Hospitaaldienste, Transvaalse Provinsiale Administrasie.

The exhibits will include instruments, apparatus, books, copies of original papers (if possible, autographed by the author), photographs, etc. The Museum will probably be housed in the new Medical School Library.

The Museum will also sponsor research and lectures in the history of medicine and it is hoped that eminent medical historians will from time to time visit South Africa to give addresses on their research work in this field.

Exhibitions will be arranged throughout the country, the first one being projected for early 1962 in Johannesburg. The inaugural lecture will probably be delivered early in the new year as well.

This valuable project deserves the support of all members of the profession. Many of our colleagues may be in a position to make valuable donations to the Museum. One of the first steps will be the collection of a complete set of books published by South African medical practitioners. It will be very desirable to deposit these, autographed by the authors, in the archives of the Museum.

The material accumulated by the Museum already includes the X-ray apparatus first used by Dr. P. Stewart in Krugersdorp, Transvaal, just after the South African War, as well as the first electrocardiograph machine used at the Johannesburg Hospital. The prototypes of the first abdominal decompression apparatus devised by Prof. O. S. Heyns, of the Department of Obstetrics and Gynaecology, University of the Witwatersrand, will also be housed in the Museum.

Growing interest in the history of medicine in South Africa is further reflected in the recent establishment of a Medical History Club at the Medical School, University of Cape Town, where it is proposed next year to celebrate the 30th anniversary of the first frog test for pregnancy developed in 1932 by Dr. H. A. Shapiro and Prof. H. Zwarenstein.

All interested in donating suitable exhibits to the Museum should communicate with:

Dr. Cyril Adler,
701 Ingram Corner, Twist & Kotze Streets,
Hospital Hill, Johannesburg. (*Telephone* 44-1938).

Where possible, the following data should be furnished with each exhibit:

1. Name of donor.
2. Brief description of exhibit.

geneeskunde in die algemeen en die ontwikkeling daarvan in Suid-Afrika in die besonder te versamel en blywend in hierdie nasionale museum te bewaar.

Die uitstallings sal onder meer bestaan uit instrumente, apparaat, boeke, eksemplare van oorspronklike referate (indien moontlik deur die skrywers self geteken), foto's, ens. Die museum sal waarskynlik in die nuwe biblioteek van die Mediese Skool gehuisves word.

Die museum sal ook as beskermheer optree vir navorsingswerk en lesings oor die geskiedenis van die geneeskunde, en daar word gehoop dat vooraanstaande mediese geskiedskrywers van tyd tot tyd besoek aan Suid-Afrika sal aflê om lesings oor hul navorsingswerk op hierdie besondere gebied te lewer.

Uitstallings sal dwarsdeur die land gereël word—die eerste waarskynlik vroeg in 1962 in Johannesburg. Die inwydingslesing sal waarskynlik ook vroeg in die nuwe jaar gelewer word.

Hierdie waardevolle skema verdien die steun van elke lid van die mediese professie. Baie van ons kollegas sal waarskynlik waardevolle bydraes tot die museum kan doen. Een van die eerste stappe is die versameling van 'n volledige stel van al die boeke wat deur Suid-Afrikaanse mediese praktisyns gepubliseer is. Dit is hoogs wenslik dat so 'n volledige stel, eiehandig geteken deur die skrywers, in die argiewe van die museum bewaar moet word.

Onder die versamelde materiaal is daar reeds 'n X-straal-apparaat wat vir die eerste keer deur dr. P. Stewart, van Krugersdorp, kort na die Tweede Vryheidsoorlog gebruik is, sowel as die eerste elektrokardiografiese masjien wat in die Johannesburgse hospitaal gebruik is. Die prototipes van die eerste dekompressie-apparaat, ontwerp deur prof. O. S. Heyns, van die Departement Verloskunde en Ginekologie, Universiteit van die Witwatersrand, sal ook in die museum bewaar word.

Die toenemende belangstelling in die geskiedenis van die geneeskunde in Suid-Afrika word ook weerspieël deur die onlangse stigting van 'n Mediese Geskiedenisklub aan die Mediese Skool van die Universiteit van Kaapstad, waar die 30ste jaardag van die eerste paddatoets vir swangerskap, soos in 1932 deur dr. H. A. Shapiro en prof. H. Zwarenstein ontwikkel, aanstaande jaar gevier sal word.

Almal wat belangstel in die skenking van geskikte uitstallings aan die museum moet in verbinding tree met:

Dr. Cyril Adler,
Ingram Corner 701, Twist- en Kotzestraat,
Hospitaalheuwel, Johannesburg. (*Telefoon:* 44-1938).

Indien moontlik moet die volgende gegewens elke uitstalling vergesel:

1. Naam van skenker.
2. 'n Kort beskrywing van die uitstalling.

CLINICAL TYPES OF VARICOSITIES*

THEIR INTERPRETATION

WILLIAM GIRDWOOD, M.B., CH.M. (RAND), B.SC. (MED.), F.R.C.S. (EDIN.), F.R.C.S. (ENG.)
Johannesburg

Varicose veins present in a variety of clinical ways, and an accurate assessment is important. One leg usually follows the pattern of the other, and familial patterns may be seen in mother, father or children. Unusual presentations may confound the clinician, and so lead to incorrect treatment.

Foote[1] describes 7 different types.

1. The massive type of varix of the median saphenous vein.
2. The intracutaneous varix.
3. The saccular varix.
4. The hair veins.
5. The saphenar varix.
6. Athletic veins.
7. Roller veins ('whip cord veins') around the ankle under the skin.

It seems to the author that much can be added to these descriptive types, and the following classification is presented to assist clinical handling of the individual case.

1. EARLY BRANCHING VARICOSITIES (FIG. 1)

In these cases division occurs high in the leg in the great saphenous and the main channel down the medial aspect of the leg may be small. Bizarre varicosities may be present on the lateral side or posteriorly. In this type of patient the finding of no obvious great saphenous tree may surprise the clinician, and treatment of the varicosities may not be instituted.

Exposure in the groin will reveal a large main vessel. The branches pass posteriorly on the medial side or laterally, as seemingly unusually situated varicosities. The bizarre posterior and lateral types could be the result of 'blow-outs' from the profunda femoris or gluteal veins either following deep vein obstruction, or possibly purely varicose; but many are really only early branching types of great saphenous varicosities.

2. PSEUDO-SMALL SAPHENOUS VARIX (FIG. 1)

In this type of case the varicosities are mostly over the upper posterior aspect of the calf. One can palpate an enlarged small saphenous vein and naturally thinks this is a small saphenous varix; but, in fact, little or no communication with the popliteal may be found and the vein continues straight up the leg to join the great saphenous tree higher or lower on the medial side.

3. MASKED SMALL SAPHENOUS VARICOSITY (FIG. 2)

In this type of case there are numerous superficial varicosities, some of which run parallel to and vertically over the true small saphenous vein which may be under the fascia. Often these cases are treated superficially and incompletely by dealing with the superficial veins only, when in fact, the large and main vein is below the fascia and must be eradicated to get a cure.

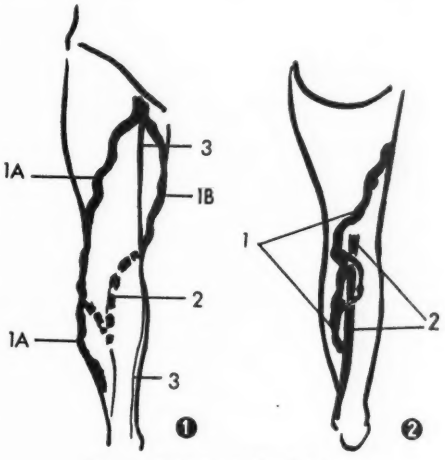

Fig. 1. Early Branching Varices.
1A: Lateral branch.
1B: Medial branch.
2: Pseudo small saphenous varix. A continuation of medial (1B) or lateral early branching varices.
3: Normal saphenous tree medially.

Fig. 2. Masked Small Saphenous Varicosity.
1: Pseudo small saphenous vein masking.
2: Small saphenous varicosity.

* Extracted from a paper given to the Surgical Forum on 2 February 1960.

4. ATHLETIC VEINS

This type of vein is common and may also occur in athletes. There is a large great saphenous tree with its characteristic branches and gross varicosities. That athletes with varicose veins may have a use for blood travelling in this type of vein is shown by the case of the athlete who enjoyed running very long distances. He got cramps at 17 miles. After surgical treatment of the gross varicosities he got cramps after 2 miles and later after 4 miles, and only after about 8 months was the patient able to run long distances again, and even broke records for 24-hour runs. A completely new collateral system must have developed by then with adjustment to the new state. Blood flows towards the heart in varicose veins in spite of the valveless state, and when the subject is standing.

5. 'INVISIBLE' VEINS

It has been the author's experience that varicosities can be present without visible or palpable varicosities. The skin and subcutaneous coverage tissues may be such that varicosities are not noticeable. Gradually an area of erythema, redness, congestion and oedema appears in the lower leg at the dependent part of the varicose tree, either anteriorly in the mid-lower leg or inferiorly above the malleolus. On surgical exposure of the great saphenous vein in the groin, gross dilatation is seen and a rather advanced varicose dilatation of the great saphenous tree is found.

6. TRANSPARENT SKIN TYPES

These patients may have true mild varices, but there is a tendency to distension and rupture of veins with haematoma formation and painful tender areas. The veins may rupture readily on handling in some patients and, in spite of the clinical appearance of relatively small and early varicosities, symptoms seem exaggerated. These cases are inclined to get varicosities in unusual positions, particularly when there is early branching. Great care must be exercised to support of the wounds after operation for a longer period than usual.

This type of patient is particularly liable to have persistent small varicosities which still remain after radical removal of the saphenous tree, and the possible effects of menstruation and pregnancies are probably more serious in these patients than others. The thin skin and soft, easily palpable, ruptured veins would appear to be part of a constitutional state. Its nature is, as yet, undetermined.

7. 'SPIDER' VARICES OR 'HAIR' VEINS

These are frequently regarded as not amenable to treatment. Feeder veins are described just beneath them, and patients are often subjected to treatment either by injection of or operation on these feeder veins; but in the experience of the author it is advisable to explore the groin, where it is usual to find a dilated great saphenous tree. Frequently these small spider varices are followed later by the development of true varicose systems, and this is particularly so when spider varices appear in the lower limb around the ankle and above the medial malleolus.

8. ANEURYSMAL VARICES

These varices (usually located in relation to just below the knee on the medial side, sometimes in the thigh and posteriorly in the popliteal fossa or below) must be excised completely. If they are left, even though the main sapheonus tree is removed and branches to the varix tied, these varices still fill, are the cause of considerable discomfort and may thrombose.

9. THE ACROCYANOTIC VARIX

In these cases the varicose veins themselves may be of little note, but symptoms are worse in cold weather and seem exaggerated in relation to the size of the varicose veins.

The patients have blotchy skin changes, seen in cold weather, and are often nervous females.

On venogram studies (Fig. 3), very thin spider-web superficial veins may be seen without any dilatation of the main trees, but here and there are dilated blobs, local dilatations along the tree. It is assumed that there are times when the spasm is less than others, and during the period that the spasm is less the varicosities have a chance to develop, but during the other times the spasm is present and is associated with pain out of proportion to the actual lesion.

10. ISOLATED VARIX

This applies to a case such as a perforator into bone, without any other varicosities, or a local varix in the region of an old traumatic lesion, or failure of the valve or 'blow-outs' in an unusual site. Above the varix the main saphenous tree may be normal.

One has seen an isolated varicose system starting just above the knee, with normal veins otherwise. There was also a normal great saphenous tree. The isolated varix ran posteriorly, terminating as a psuedo small saphenous tree (Fig. 4). In another case a varix had perforated bone and after eradication of the varicosities, pain still persisted in the underlying tibia and, although no evidence of haemangioma could be found on X-ray, deep therapy was needed before the pain disappeared.

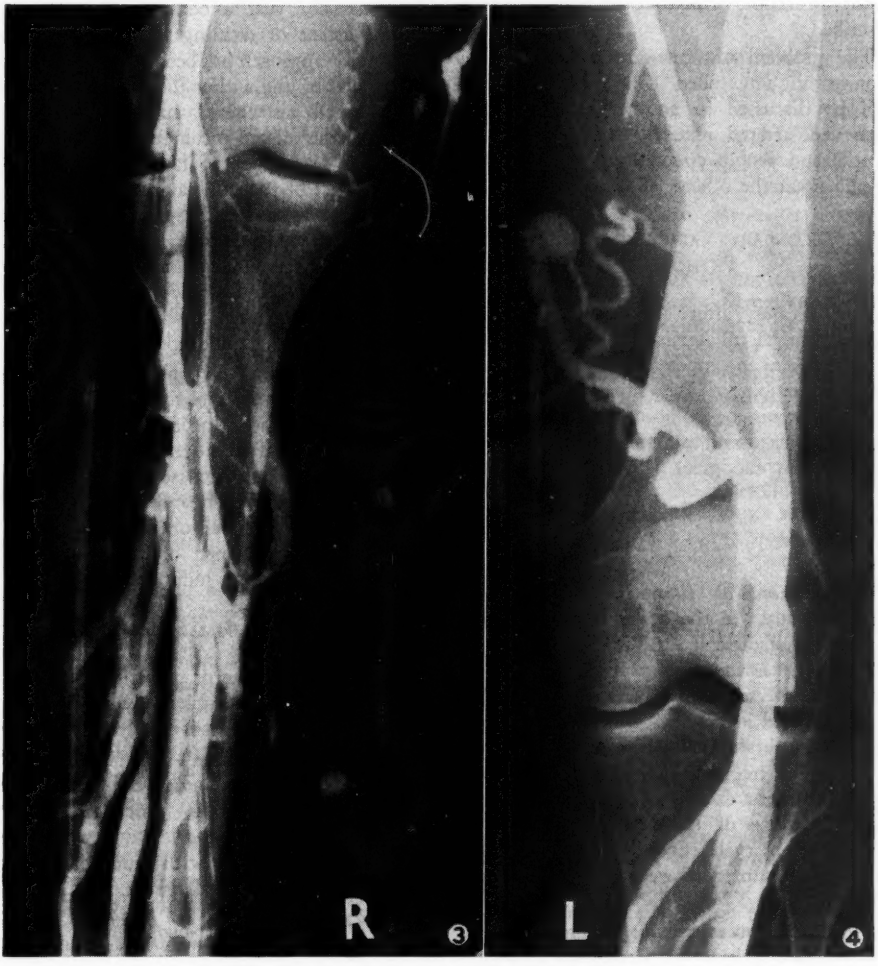

Fig. 3. Acrocyanotic Varix. Small varicosities and marked spasm of intervening superficial veins.
Fig. 4. Isolated varix starting in lower third of thigh and presenting posteriorly as a pseudo saphenous varix

11. ARTERIO-VENOUS VARICES

The varicose veins in the congenital arterio-venous aneurysms in which a hot leg is present with gross varicosities which contained bright red blood, and progressive aggrevation, with finally ulceration in many cases occurs, is well described.

The problem of how arterio-venous limbs acquire an unexcelled collateral circulation, will be discussed in another article dealing with veno-arterial reflexes, the association of arterial and venous circulations, and the effect of one upon the other.

12. SECONDARY VARICES IN DEEP VEIN PATHOLOGY

In these cases, after an obstructive lesion, varices form as collaterals. In other cases there is deep vein incompetence. When there is gross dilatation of the superficial or deep venous systems, or both together, progressive dilatation occurs in all venous systems, and especially in the great and lesser saphenous trees.

13. 'BLOW-OUTS'

The Significance of 'Blow-Outs.'[2] When there are 'blow-outs' in the lower limb, the pump mechanism of the calf for pumping blood back to the heart is ineffective. It means that the blood is dispersed ineffectively into the superficial tree; and it indicates either an obstructed deep vein at higher level, or a dilatation of the deep venous tree with high venous pressure. Sooner or later a dilated incompetent tree must lead to failure of the pumping mechanism with a vicious cycle effect, with dilatation not only of the superficial veins but also of the deep veins.

Much has been said about the eradication of these 'blow-outs.' Linton[4] describes a very complete operative procedure to eradicate these offending 'blow-outs.' The attack upon the 'blow-outs' on the medial side of the leg has been adequately covered in publications by the author, and mentioned as part of the contribution of strip-grafting.[3]

The procedure (known as the 'Cockett procedure, was first mentioned in 1953[5] when Cockett described 2 cases of direct exposure of 'blow-outs' medially) has long been part of the Linton procedure. The disadvantages of its use are when induration and sepsis inevitably cause necrotic skin flaps and, of course, does not touch lateral 'blow-outs' or those in posterior situations.

In the last year a better, safer and more radical means of tackling the 'blow-outs' by a posterior approach has been used. The operation called by the author the 'seam operation' is described elsewhere,[6] and is designed to approach the dilated incompetent communicating veins from deep to fascia, from the posterior aspect of the calf, saving the sural nerve and inspecting the small saphenous tree. When this is large and varicose it is stripped, but otherwise it can be left, and the 'blow-outs' both medially and laterally can be dealt with at the level where the 'blow-outs' pass through the fascia and join the deep branches.

Experience with this operation has shown that a ligature superficial to fascia is not only difficult, but may be incomplete, as the communicators may divide deep to fascia, or may run a fairly long course with subsidiary branches deep to fascia; and, finally, the healing in the posterior incision is invariably good. This cannot be claimed of incisions on the medial aspect through indurated tissues.

SUMMARY

Different clinical paterns of varicose limbs are described with the problems which occur in relation to these different patterns.

The 'seam operation' is mentioned for dealing with the perforators, the incompetent perforators or 'blow-outs' which are so common in the post-phlebitic leg, and which cannot be properly dealt with from the medial aspect through indurated tissues.

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ASPECTS OF SEXUAL BEHAVIOUR

1: FRIGIDITY

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'Oftentimes in denying yourself pleasure you do store the desire in the recesses of your being. Who knows but that which seems omitted to-day, waits for to-morrow;
Even your body knows its heritage and its rightful need and will not be deceived;
And your body is the harp of your soul,
And it is ours to bring forth sweet music from it or confused sounds.'

The Prophet. Kahlil Gilran.

In this study of frigidity two aspects have been considered. Part 1 discusses the psycho-sexual aspects of sexual responsiveness, definitions and classification, the normal psycho-sexual development of the female and, finally, the psycho-dynamics of frigidity.

Part 2 is a psycho-social study of sexual attitudes and the status of women. The development of human sexual relationships is discussed, followed by a comparison of attitudes in several primitive societies, an appraisal of the historical variations and variations in several cultures in modern times.

Finally, there is a review of the sexual attitudes and the status of women which has resulted in the emergence of frigidity as a clinical entity at the present time.

Human sexual behaviour can only be understood when seen as part of a total personality, which in turn reflects the cultural pattern. The instinctive basis of the sex drive is channeled by the social influences that determine its course. Sex membership determines the role that the individual plays in the group; the cultural factors influence the psycho-sexual development.

DEFINITION AND CLASSIFICATION

The word 'frigidity' requires definition. Unlike male sexual incapacity, in which failure to initiate, sustain and successfully conclude the sexual act are definite and obvious, the female's sexual responsiveness depends on her partner. The relative phenomena are mainly subjective and therefore less readily manifest.

Bergler defines frigidity unequivocally.

'Under frigidity we understand the incapacity of woman to have a vaginal orgasm during intercourse. It is of no matter whether the woman is aroused during coitus or remains cold, whether excitement is weak or strong, whether it breaks off at the beginning or end, slowly or suddenly, whether it is dissipated in preliminary acts or has been lacking from the beginning. The sole criterion is absence of vaginal orgasm.'

This theory is by no means generally accepted. Some writers do not accept vaginal orgasm at all; others differentiate between vaginal orgasm and clitoral orgasm and will accept either as an index of female sexual responsiveness. Although Bergler argues very pertinently (in terms of anatomy, the physiology of coitus and the neurophysiology of the female genitalia) for the acceptance of vaginal orgasm, his definition of frigidity, though clear and definite, makes no allowance for those women who are to all intents and purposes well adjusted, whether they enjoy only clitoral orgasm or no orgasm whatsoever.

Malleson discussed this aspect of the problem.

'Frigidity is generally used to describe cases in which there is an absence of the characteristic erotic sensation in either the vagina, the clitoris or both. Sometimes it is applied to any condition where the woman is unable for intrinsic reasons to attain orgasm, even if her erotic feeling is extremely urgent. This application of the word seems calculated to confuse patient and doctor, and I have known it to cause great offence, the woman feeling that such capacity as she has has been belittled. To my mind frigidity should be reserved for a woman who lacks emotional or physical response to the sexual relationship under discussion. Thus disinclination and lack of tumescence are symptoms of frigidity—yet a woman who experiences no erotic feeling may suffer from neither. There is a need for a term to describe the large group of women who can experience erotic sensation in greater or lesser degree but insufficiently to attain orgasm. Until such a term is coined they must be described as "lacking orgasmic capacity".'

Classifications are usually based on the severity of the frigidity. Weiss and English suggest this simple one:

1. Occasional failure to obtain orgasm.
2. Only occasional orgasm.
3. Mild pleasure in coitus but without orgasm.
4. Vaginal anaesthesia with no special aversion to coitus.
5. Dyspareunia and vaginismus.

Bergler uses a more detailed classification, but also in terms of severity:

1. *Pseudo-frigidity* (as distinguished from true frigidity). This is due to ignorance, clinging to false sexual theories, incorrect techniques.
2. *Obligatory or Facultative Frigidity.* A woman may be frigid—in any degree but with all men, i.e. obligatory frigidity; or she may suffer from facultative frigidity (i.e. frigidity of some type or other) but experience orgasm with certain men under special neurotic conditions.
3. *Frigidity of the Nymphomanic Type.* Strong excitement is felt, mounting repeatedly but never resulting in orgasm. Women of this type seek men insatiably.
4. *Clitoric Orgasm with Vaginal Hypoaesthesia.* Clitoric orgasm is attained, after coitus, entirely through friction of the clitoris applied by the man.
5. *Relative Frigidity with Vaginal Sensitivity but Sudden Cessation of Excitement before Orgasm.*
6. *Relative Frigidity with Vaginal Hypoaesthesia.* Relatively strong excitement is experienced at the thought and expectation of coitus, but with the immediate prospect all desire disappears.
7. *Total Frigidity with Vaginal Hypoaesthesia.* Slight excitement at the beginning of intercourse, remaining at the same level throughout the act.
8. *Total Frigidity with Vaginal Anaesthesia.* This type of woman is wholly without sexual interest. Feelings of revulsion, disgust and the desire to get it over with in a hurry, replace all traces of vaginal pleasure. Lubricating glandular secretion is absent. There is no sensation in clitoris or vagina during sexual play. Vaginismus is the highest degree of this form of frigidity.

Dyspareunia and even vaginismus may be the result of organic disease or maldevelopment. They are comparatively rare and satisfactory sexual function will follow their correction by medical or surgical measures, provided that the basic personality structure allows for such function. There is far more likely to be an exaggeration of minor discomfort by psychoneurotic women.

Considerable pleasure may be found in sexual arousal which does not proceed to orgasm, and in the social aspects of a sexual relationship. Whether or not she herself reaches orgasm, many a female finds satisfaction in knowing that her partner has enjoyed the contact and in realizing that she has contributed to his pleasure. (Analysts of stature are inclined to think that identification with the male in his orgasm constitutes a woman's true sexual fulfilment). There are histories of persons who have been happily married for a great many years, in the course of which the wife has never responded to the point of orgasm. Although we may use orgasm as a measure of the responsiveness of the female, it is not the only significant factor in a satisfactory sexual relationship, especially as far as the female is concerned; and at the turn of the last century any orgasmic experience or even the experience of sexual pleasure may have precipitated as severe a psychoneurotic illness as the lack of it does to-day. Thus one would suggest the following definition of frigidity.

Frigidity is a symptom of female maladjustment which is manifested in the sexual situation in the form of a failure to respond either at a physical or a psychical level, or both. The degree of severity of this frigidity is a measure of the degree of maladjustment.

NORMAL FEMALE PSYCHO-SEXUAL DEVELOPMENT

Following on our definition, one can only understand frigidity in the light of the normal development of the female. At the outset one must stress that it is essential for mental health that the infant should experience a warm, intimate and continuous relationship with a mother, and in which both find satisfaction and enjoyment. It is this primary emotional bond with the mother that lays the foundation for the development of character, mental health and satisfactory adjustment. The ill effects of deprivation vary with degree. Partial deprivation brings in its train anxiety, excessive need for love, powerful feelings of revenge and, arising from these, guilt and depression. Complete deprivation may completely cripple the capacity to make relationships with other people. The children remain completely affectionless; for though many may crave affection, they have a complete inability either to accept or reciprocate it.

Before the baby becomes orientated toward her world, her interest is bounded by her physical organization. Around these functions are centred her keenest interest and satisfaction. Let sucking be curtailed, and she will resort to the substitute satisfaction of finger sucking. But no doubt as important as the early feeding frustration is the more important psychological frustration of the withdrawal of love and security that accompanies the withdrawal of the nipple.

With the introduction of bladder and bowel control, the child's attention is focused on excretory structure and functions. Again intrinsic satisfactions and frustrations are less important than social reward and punishments meted out for her performance. Moreover, anxieties centering around early toilet training may carry over to the sex area because of the close topographical association. Long before the genitals are capable of reproduction they have become a focus of interest to the child. Association with excretory function attracts attention; moreover they are easily stimulated and can be the source of erotic pleasure. The

Freudian contention that finger sucking is the equivalent to masturbation may be more acceptable if put down the other way, that genital manipulation is the equivalent of finger sucking and more adequately expresses the polymorphous nature of these primitive pleasures. All forms of auto-eroticism (oral, excretory or genital) probably represent an important phase of psychological weaning, and they serve to help the child to liquidate her dependence on her mother and build more confidence in herself.

As soon as mental growth permits, the child awakens socially and begins to notice other individuals. The satisfactions that were once exclusively associated with functioning of her own body become transferred to those who minister to her bodily needs. Because of the closely knit character of the family, it is in the family that the child learns to love as well as to be loved. Here she makes her first social overtures and the success of these early relationships determines to a large extent the success of later relationships. To the little girl, an early warm companionship with her father is a preparation for later adjustment to boys and men. To the extent that her mother enjoys her own femininity, the daughter will find an appropriate model for her own developing womanliness.

As the child's social world expands, these early parental attachments are naturally and gradually outgrown and replaced by relationships with people outside the family circle. Early sexual interests lie mainly in differences. In becoming acquainted with her own body, the child naturally compares it with those of adults and other children. Curiosity and exploration are a natural sequence. The facts are accepted by most children and are assimilated smoothly with other experiences of everyday living. Freudians cite contrary material with expected penis envy and castration fears. Whether such cases more readily find their way to an analyst's couch or whether the analyst in his enthusiasm for Freudian theory suggests to the young patients anticipated complexes is an open question. Emotional conflict has been traced to adult attitudes, particularly with naming of the parts of the body, and the symbols carry an onus of shame and embarrassment and acquire a sinister and secret atmosphere.

Along with awareness of genital differences the child becomes aware of what is expected of her as a member of her sex group. Awareness of sex and sex-appropriate conduct makes its appearance early in life through observation and imitation of models in the home. Early successful family training is greatly reinforced by the sex typing control to which the child is subjected at school. Her prestige depends on her learning the sex-appropriate code of clothing, head-dress, gait, voice language, interests and behaviour.

Puberty is the physiological milestone that marks the end of childhood. The major problems of the adolescent are the achievement of independent status and the working out of a satisfactory relationship with the opposite sex. The physiological changes have the effect of causing rapid and marked bodily changes, of size and shape and hair distribution, the development of secondary sex characters and of mobilizing into a powerful internal drive the sex interests that previously had occurred chiefly as a result of external stimulation. In spite of the superstitions and taboos which surround the menses, this does not usually have a traumatic effect on the individual's later life. There is always the risk, however, that it may affect emotionally immature girls who do not want to grow up and assume their responsibilities as women; or male-orientated women may regard it as a further restriction and try to suppress this confirmation of the female role.

Sexual orientation must be viewed as emerging from a rich and varied socializing experience. Of the various possible directions sexual behaviour may take, nature and nurture conspire to focus on the opposite sex. There is much trial and error before the acceptable mode of sexual expression is attained. There is a gradual progression in hetero-sexual growth from minor intimacies to the point of complete intercourse as a phase of general social development. The success of the adolescent's adjustment to the opposite sex is not merely a matter of appropriate sex behaviour. It depends essentially on the acceptance of the social role this sex membership entails. This is by no means an easy task, considering the ever-changing social expectations of girls and boys. At this time the girls will want to be boys because boys do all the wonderful things and get all the admiration. Unless social losses are counterbalanced by placing a high value on her newly acquired form and function, there is a grave risk that she will reject not only her unsatisfactory social role but, along with it, her supremely satisfying biological function.

The environment can be experienced by the human being in two ways. In the first instance, all the events of the environment are perceived in relation to the individual. Second,

there is that mode of experience which is part of a long chain of historical evolution, a part of the eternal life stream. Existence is no longer defined by the personal past. Instead, the impersonal past creates a timeless background, a perspective of eternity and immortality. In motherhood woman is given a wonderful opportunity of directly experiencing this sense of immortality. The female reproductive act is not merely a biological act. It can be conceived as an individual manifestation of the universal fluctuation between creation and destruction and as the victory of life over death. The marriage relationship is not adequately fulfilled either biologically or psychologically unless it results in a new family. To meet adequately the challenge of child-rearing demands emotional maturity on the part of both parents with a full appreciation of their respective roles.

DYNAMICS OF FRIGIDITY

FACTORS AFFECTING ORGASM

Orgasm by our definition does not preclude frigidity and lack of orgasm does not indicate frigidity; but it presently remains the best measure of female responsiveness. Kinsey *et al.* use this as a criterion of female sexual response and discuss the factors affecting orgasm.

The nature of a female's sexual response must depend on her inherent responsiveness, the extent of her previous experience and the nature of the stimulus which she meets.

It is probable that physical and physiological differences are concerned in sexual response. Very wide variations in responsiveness are encountered. Some women show an extremely rapid response, reaching orgasm within a matter of seconds and some reach orgasm repeatedly in a short period of time. These capacities could not conceivably be acquired through training, childhood experience or psychotherapy. Similarly, it seems reasonable to believe that at least some women who are slow of response represent the opposite anatomical and physiological extreme.

Orgasmic capacity is highest in the younger age group and falls steadily with advancing years. This is independent of the greater number of marital contacts in the younger groups. As a woman advances in years, in addition to the diminution of her orgasmic capacity the opportunities for orgasmic response, too, becomes less.

There is no correlation between the early onset of the menarche and orgasmic response, but there is a fall in response among those who do not reach puberty until 15 or 16 years of age. Though orgasmic capacity is higher in the younger age groups, a higher percentage of females who marry before 20 remain sexually unresponsive. The highest response is found in the age group 21 to 25.

The frequency of marital coitus is essentially the same among females of several educational levels, yet the number of females reaching orgasm is distinctly higher among the upper educational levels, whether the female has parents from that educational level or has reached that level of education herself. There is little evidence that the religious background (whether the subjects were devout, moderate or inactive) affect marital activity or responsiveness. Only the more devout Catholics seemed to have been more restrained in their early years with a subsequent lag before their first orgasm.

There is a definite correlation between orgasmic response in marital coitus and premarital orgasmic experience, whether from intercourse, petting, masturbation or dreams. The more responsive female may have discovered orgasm before her marriage in social or solitary activities and carried this into her married life. On the other hand, orgasm may be learned through experience and such learning is much more likely to be effective before inhibitions have developed or become too fixed. The techniques of masturbation and of petting are more specifically calculated to affect orgasm than techniques of coitus itself. It is sometimes possible for a female to learn to masturbate to orgasm, even though she has difficulty in effecting the same end in coitus. Having learned what it means to suppress inhibitions and abandon herself to spontaneous physical reactions, she may become capable of responding in the same way in coitus.

From the days of the most ancient love literature down to contemporary marriage manuals there has been a considerable interest in the anatomy and mechanics of sexual stimulation and response. It has been widely accepted that the effectiveness of the sexual relationship depends primarily on the skill and art of the male partner. Attention has been concentrated on the sensory end-organs and those parts of the body where the sense organs are located. But our present understanding indicates that sexual response also involves a group of physiological reactions of which the development of muscular tension throughout the body may be amongst the most important. Response in the female and, for that matter,

in the male may not depend on elaborate, prolonged and varied petting techniques as upon brief but uninterrupted pressures and continuous rhythmic stimulation which leads directly to orgasm. It is even suggested that the use of extended and varied techniques may interfere with the female's attainment of orgasm.

THE DIFFERENCE BETWEEN SEX AND LOVE

There is an important aspect of the sexual relationship. Reik challenges Freud's concept of love as sex which has been arrested or diverted from its aim, but which is essentially the same as the crude sexual desire. He agrees that sex and love are frequently united and directed to the same object, but will not accept that love is a changed form of sex. Sex is an instinct, a biological need, one of the great drives, like hunger and thirst. It can be localized in the genitals and in other erogenous zones. Its aim is the disappearance of a physical tension. Originally objectless, later on the sexual object is simply the means by which the tension is eased. None of these characteristics can be found in love. If we do not accept the opinion of the ordinary man and woman that love lives in the heart, we are unable to place it. It is certainly not a biological need, because there are millions of people who do not feel it and many centuries and cultural patterns in which it is unknown.

Sex is originally objectless. Love certainly is not. It is a very definite emotional relationship between two specific people. The aim of sex is the disappearance of a physical tension: a discharge and a release. The aim of love is the disappearance of psychical tension: a relief. Sex appears as a phenomenon of nature common to man and beast. Love is the result of a cultural development and is not even found among all men. It is not subject to periodic fluctuations nor can it be casual about its object. It is always a personal relationship. Its object is always seen as a personality and a person. Sex is utterly selfish. Love is not unselfish, but it is difficult to name its selfish aims other than that of being happy in the happiness of the loved one. It is always concerned with the welfare or happiness of the other person, regrets the other's absence, wants to be with the partner, feels lonely without that company, fears calamity and danger for the partner.

Sex is undiscriminating. Love always makes a choice. It is highly discriminating; and there is no such thing as an impersonal love. A person can be forced to sexual activity but not to love. Love is a passion. But do all passions originate in sex? Are there not other passions as ardent and as powerful as sex? Love can exist before sexual desire is felt. It can outwear and outlive sex. Why should there be an intense desire for love in addition to the desire for a full and satisfactory sex life?

PSYCHO-DYNAMICS OF FRIGIDITY

Frigidity is the expression of an inhibition of complete sexual experience rooted in anxiety unconsciously associated with the full attainment of the sexual aim. The woman who has failed to forge the primary emotional bond with her mother will be unable to make an affective relationship with another person. Such a woman cannot accept or reciprocate love and will fail in the sexual situation.

In less severe cases of maternal rejection, there may nevertheless be an incomplete fusion of somatic and affective components of the sexual complex. In many minds the organs of generation become associated with organs of excretion and with the idea of being unclean; sex may never lose the taint of being dirty.

For some persons sex always retains its association with sinfulness, and can only be executed under the condition of the forbidden. This tragic attitude makes marital sex valueless, as nothing is forbidden. One finds responsiveness in premarital or extramarital affairs.

Masculine identification can be of great importance. These women are vaginally frigid while the clitoris may preserve normal excitability. They often prefer to assume the superior role in coitus. Furthermore, unconscious comparisons of the sexual partner with the father figure may disturb sexual enjoyment; or there may be the evocation of unresolved conflicts with the parental figures. Frigidity may be due to a fear of punishment for violation of sexual prohibitions.

A woman who is so constituted that she can only find sexual outlet in homosexual relationship or other perverse acts will find herself frigid in normal heterosexual relationship; or there will be those who may use coitus as a defence against these perverse drives. They aim at contradicting the existence of perverse sexual goals by stressing the normal ones. A certain sexual pleasure may be felt, but never the complete relaxation of orgasm. The sexual pleasure may remain as a goal in itself but, complete gratification being denied, there arises a further need for reassurance.

Many factors of anxiety, fear, novelty and ignorance may be found associated with frigidity early in marriage. All too often the girl has lacked any semblance of learning nor does she know what to expect. The 'naughty' girl has gradually learned through experiment. So the 'wages of sin' is serenity and the wages of virtue shock, enough to complete the rout of a tense, frightened, ashamed and embarrassed girl; and to the triad of innocence, ignorance and inexperience may be added features of fear, anxiety and even revulsion. Other adjustments in the marriage may become protracted and resentment and guilt may be precipitated. Fear of pregnancy and even fear of motherhood may also give rise to anxiety, feelings of inadequacy, resentment and guilt.

The biological differences in sexual experience may contribute to greater emphasis on one or other character trends in the 2 sexes. The male needs to perform, while no achievement is required of the female. Since her satisfaction depends on his ability, her fear is of being abandoned or being frustrated. Woman can make herself available to man at any time and give satisfaction, but his possibility of satisfying her is not entirely under his control. In general the male gets at least physical satisfaction out of his sexual performance. But because he cannot force himself to perform, he is less likely to find himself in the midst of the totally uncongenial situation that the female frequently does who permits herself to be used when she is not sexually interested or is at the most mildly roused. At most she can get only a vicarious satisfaction in the male pleasure. Obviously the sexual act is satisfactory to the woman only when she actively and from choice participates in her own characteristic way. If she were free to choose, she would refuse the male except when she actually did desire to participate. Why, then, does she submit? Most frequently the cause is a feeling of insecurity in the relationship. The male may insist on satisfaction. The feeling of insecurity may arise from the woman's own feeling of inadequacy or from the cultural attitude that her needs are not as pressing as his. Both men and women have subscribed to this view and therefore there is a tendency not to be concerned about satisfying or considering her needs.

Sex in general has come under disapproval through the puritan ideal of denial of body pleasure and this makes sexual needs something of which to be ashamed. Another attitude already mentioned which derogates sexuality, especially female sexuality, is the great emphasis on cleanliness; the organs of generation become associated with the organs of excretion and so with the idea of being unclean.

The effect of all this is that it may inhibit a woman's natural expression of desire for fear of appearing unwomanly while she feels she must be ready to accommodate on all occasions, i.e. she has no rights of her own. When an important aspect of a person's life becomes undervalued it has a negative effect upon self-esteem and this affects her own evaluation of herself as a person. There will be an interference with her natural self-expression and spontaneity with resulting resentment and discontent.

There is a trend to attribute to sex a secondary rather than a primary role in marital adjustment. Personal congeniality resulting from shared values and social attitudes seems to lead to harmony in the sexual relationship. Happily married people express an approximate equality of drive, mutual enjoyment of sexual relationship and an absence of desire for or actual indulgence in extramarital affairs. It is fairly certain that sexual factors alone are not responsible for marital happiness or unhappiness, but happiness or unhappiness is immediately reflected in the sexual sphere.

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(To be concluded)

MEDICO-LEGAL SECTION

'VIOLENT EXTERNAL AND VISIBLE MEANS' CAUSING ACCIDENTAL DEATH

POST-MORTEM DETERMINATION OF BRAIN ALCOHOL

AGAIKATSIKAS, N.O. V. ROTTERDAM INSURANCE CO. LTD.*
(CAPE PROVINCIAL DIVISION)

1958. *September* 9, 10, 12, 23. VAN WINSEN, J.

In the early hours of the morning the deceased had crashed his lorry into another lorry, which was parked in front of him in close proximity to a street light, as the result of which he had received fatal injuries. In an action by his executor for £1,000, the sum with which he had insured with the defendant company, it appeared that in terms of the policy the company had agreed to insure the deceased "against bodily injury caused by accidental violent external and visible means, which injury shall solely and independently of any other cause, cause his death or disablement. And subject to the terms, provisos and conditions of this policy the company hereby binds itself to pay to the insured or, in the event of his death, to his legal personal representatives the sum or sums of money as provided in the schedule." Conditions 1 (*a*) and 7 of the conditions above referred to stated:—"1. This policy does not insure against death or disablement directly or indirectly caused by, arising from, or traceable to . . . (*a*) Suicide or attempted suicide (whether felonious or not), insanity, intoxication or venereal disease. 7. This policy and the insurance thereby effected are, and shall be, subject to the terms, provisos, conditions and endorsements hereof and hereon, all of which are to be deemed conditions precedent to any liability on the part of the Company and are to be taken as incorporated herein". Defendant company put in issue the question whether the "violent external and visible means" which had caused the injuries were accidental. It also relied on condition (1) (*a*) and there was conflicting evidence as to whether the deceased was in a state of intoxication.

Held, that the plaintiff had discharged the *onus* of proving that the event insured against had occurred.

Held, further that the *onus* of proof in regard to the events envisaged by condition 1 (*a*) rested upon the defendant company.

Held, further, if it could be proved that the state of intoxication of the deceased materially contributed to the bringing about of the collision, that defendant could be said to have discharged the *onus* upon it.

Held, further, however, as the defendant had failed to discharge the *onus* resting upon it of proving that the deceased was intoxicated on the night in question and that his death had resulted directly or indirectly from that condition, that plaintiff was entitled to judgment as claimed.

VAN WINSEN, J.: In the early hours of the morning of the 6th September a lorry was parked on the left-hand side of Voortrekker Road, facing in the direction of Maitland. It had started to drizzle and the driver, one Beukes, had stopped to make an adjustment to his windscreen wiper. While so parked in close proximity to a street light, another lorry driven by John Stergianos, coming from the direction of Cape Town, crashed into it with considerable force from the rear. Stergianos, whom I shall refer to as the deceased, received severe injuries in the collision and died within half an hour. He had on the 14th March of the same year taken out an accident and sickness insurance policy in the sum of £1,000 with the defendant Company. After his death his executor, the plaintiff, claimed this sum from defendant Company. The latter repudiated liability, and its right to do so forms the subject-matter of the present suit.

The insurance policy under which the deceased was insured states that the Company agrees to insure the deceased

"against bodily injury caused by accidental violent external and visible means, which injury shall solely and independently of any other cause cause his death or disablement . . . And subject to the terms, provisos and conditions of this policy the Company hereby binds itself to pay to the insured or, in the event of his death, to his legal personal representatives the sum or sums of money as provided in the schedule."

* The appeal which had been noted was not proceeded with. *Editors.*

Conditions 1 (*a*) and 7 of the conditions above referred to state as follows:

"1. This policy does not insure against death or disablement directly or indirectly caused by, arising from, or traceable to . . .

(*a*) Suicide or attempted suicide (whether felonious or not), insanity, intoxication, or venereal disease.

7. This policy and the insurance thereby effected are, and shall be, subject to the terms, provisos, conditions and endorsements hereof and hereon, all of which are to be deemed conditions precedent to any liability on the part of the Company and are to be taken as incorporated herein."

In its plea resisting the executor's claim, defendant Company while admitting that deceased died as a result of the injuries sustained by him in the collision above referred to and that the injuries were caused by violent external and visible means, put in issue the question of whether such means were accidental. Further, defendant relied on condition 1 (*a*) quoted above, seeking to avoid liability on the ground that at the time of the occurrence of the collision the deceased was

"in a state of intoxication and that his death was caused directly or indirectly by and/or arose from and/or was traceable to intoxication."

The latter allegations were denied in the replication.

It is of some importance to decide where the *onus* of proof lies in respect to the disputed issues. I think it is clear that plaintiff must prove that the deceased sustained bodily injury caused by accidental means, and that his death resulted from such injury. That bodily injury causing death should result from accidental means is an element in the definition of the risk which defendant Company assumed in its policy. Plaintiff must therefore establish that the risk insured against has eventuated. (See MacGillivray *Insurance Law,* 4th ed. sec. 1601; Welford *Accident Insurance,* p. 291, and *Griessel, N.O.* v. *S.A. Myn en Algemene Assuransie (Edms.) Bpk.,* 1952 (4) S.A. 473, in which latter case the policy is very similarly worded to the one under which the deceased was insured.)

The question concerning the party upon whom the *onus* rests to prove that the injury causing death was directly or indirectly caused by, or arose from, or was traceable to, intoxication presents more difficulty. According to the authorities it seems that if the condition set out in condition 1 (*a*) of the Company's policy constituted an exception to the general risk assumed by the Company in the earlier portion of the policy, then the *onus* would lie upon the Company to prove the facts constituting the exception. If, on the other hand, condition 1 (*a*) was intended by the parties to be definitive of the risk assumed by the Company, the *onus* would rest upon plaintiff to prove that the deceased was not intoxicated, or that if he was, it did not directly or indirectly cause his death. In *Eagle Star Insurance Co. Ltd.* v. *Willey,* 1956 (1) S.A. 330 (A.D.), the Court adopted with approval rules formulated by BAILHACHE, J., in *Munro, Brice & Co.* v. *War Risks Association Ltd. and Others,* 1918 (2) K.B. 78, where the learned Judge stated as follows:

"When the promise is qualified by exceptions, the question whether the plaintiff need prove facts which negative their application does not depend upon whether the exceptions are to be found in a separate clause or not. The question depends upon an entirely different consideration, namely, whether the exception is as wide as the promise, and thus qualifies the whole of the promise, or whether it merely excludes from the operation of the promise particular classes of cases which but for the exception would fall within it, leaving some part of the general scope of the promise unqualified. If so, it is sufficient for the plaintiff to bring himself *prima facie* within the terms of the promise, leaving it to the defendant to prove that, although *prima facie* within its terms, the plaintiff's case is in fact within the excluded exceptional class. . . . When a promise is qualified by an exception which covers the whole scope of the promise a plaintiff cannot make out a *prima facie* case unless he brings himself within the promise as qualified."

In the same case BAILHACHE, J., indicated that the question of whether a promise is a promise with exceptions or a qualified promise depends on the construction of the instrument containing the promise as a whole. He warned that in construing a contract with exceptions it must be borne in mind that a promise with exceptions can generally be turned by an alteration of phraseology into a qualified promise, and that the form therefore in which a contract is expressed is material. In the *Eagle Star Insurance Co. Ltd.* case, *supra,* CENTLIVRES, C.J., laid great stress upon the importance of form in determining into which of the two categories the promise fell. In the present case, therefore, the intention of the parties to the contract must be sought in the form of the words used by them in the contract. In the policy quoted above the parties have defined the risk assumed by the Company as being one against bodily injury:

". . . caused by accidental violent external and visible means, which injury shall solely and independently of any other cause cause his death."

The policy then goes on to bind the Company to pay the insured, but always subject to the terms, provisos and conditions of the policy. This phraseology suggests to me that the parties were saying that despite the eventuation of the risk insured against the Company's liability to pay would be further restricted by the provisos and conditions. The conditions thus in my opinion constitute an exception to the Company's liability. Condition 7 quoted above when it refers to the conditions as being conditions precedent to the Company's liability further strengthens this view. In *Griessel's* case, *supra,* the Court had occasion to deal with the question of *onus* under a policy which, as far as can be judged from the report, is in substantially the same form as the present policy. There, too, the risk was defined in a part of the policy and subsequently conditions were inserted, condition 1 (*a*) of which is in the same form as condition 1 (*a*) of the present policy. MURRAY, J., (as he then was) made the following observation at p. 478 in regard to the *onus* of proof in terms of that policy:

" But as I see the present position (*a*) the plaintiff must at the outset convince the Court on a balance of probability, and having regard to all the evidence led, that the deceased died as a consequence of an accident, and not of his own conscious intention to kill or maim himself. It is not enough merely to bring *prima facie* evidence of accident and then contend that the *onus* shifts on to the insurer to show that the deceased deliberately caused his own death or injury. (*b*) Only after an ' accident ' has been proved is it necessary for the defendant to escape liability by showing, also on a balance of probability, that the cause, or a material contributory cause of the accident, was the consumption by the deceased of intoxicating liquor."

In the light of the above-quoted *dictum* and of the frame of the policy in the present case I conclude that the *onus* of proof in regard to the events envisaged by condition 1 (*a*) rests upon defendant Company.

I turn now to consider whether the plaintiff has established that the bodily injury received by the deceased was occasioned by accidental means, and that his death resulted from such injury. Plaintiff must prove in order to discharge this *onus* that the bodily injury was accidental in the sense that it resulted from some fortuitous or some unexpected cause. If the bodily injury had resulted from some conscious or purposeful act on his part it could not be said to have been occasioned by accidental means. Stroud *Judicial Dictionary, s.v.* "accident" defines it *inter alia* as " any unintended or unexpected occurrence which produces hurt or loss ". Welford *Accident Insurance* at p. 295 and MacGilivray *Insurance Law,* 4th ed. secs. 1501 and 1601, are to the same effect. Plaintiff has proved the fact of the collision involving a lorry driven by the deceased and a stationary lorry; he has proved that the deceased suffered severe injuries in the collision and he has proved that the injuries solely and independently of any other cause occasioned his death. This latter fact is indeed admitted by defendant on the pleading. No evidence was available to cast any light upon the question as to how and why the collision occurred. There is nothing to suggest that deceased by some conscious act on his part deliberately ran his lorry into the back of the stationary lorry. There is nothing to suggest that he harboured any suicidal intention or that he suffered from any domestic, business or financial worries. In the absence of any such evidence and of any evidence as to how the collision actually occurred, coupled with the fact that people do not as a rule set out deliberately to injure themselves, I think it can be said on a balance of probabilities that plaintiff has proved that the bodily injury causing deceased's death was occasioned by accidental means. In my view therefore plaintiff has discharged the *onus* of proving that the event insured against has occurred.

The next question is whether defendant has on a balance of probabilities discharged the *onus* of proving the exception set out in condition 1 (*a*) of the policy. I cannot accept the contention advanced on plaintiff's behalf that the word " intoxication " in this condition meant something more than that the deceased was under the influence of liquor to a certain extent, and that defendant was required to prove that he was drunk to the extent that he was a danger to his own safety and that of others. The Company would in my view in the circumstances of this particular case prove " intoxication " within the meaning of the exception if it could establish that due to the consumption of alcoholic liquor there was an impairment either of the deceased's physical faculties (e.g. his vision), or his mental faculties (e.g. his muscular co-ordination), or his judgment (e.g. rendering him prone to take risks he would not have taken but for the liquor he has consumed). (See Stroud *Judicial Dictionary, s.v.* " intoxicants ", *R.* v. *Spicer,* 1945 A.D. 431 at p. 436.) The exception states that the Company is not liable in case of death " directly or indirectly caused by, arising from, or traceable to . . . intoxication ". The word " indirectly " would seem to absolve the Com-

pany from having to prove that the intoxication of the deceased was the proximate cause of the injuries sustained by him. (See *Coxe* v. *Employers' Liability Assurance Co. Ltd.*, 114 L.T. 1180.) If it could be shown that the state of intoxication of the deceased materially contributed to the bringing about of the collision then I think defendant could be said to have discharged the *onus* resting upon it. This proposition was assented to by plaintiff's counsel and appears to find support in a case such as *Bonnington Castings Ltd.* v. *Wardlaw*, 1956 (1) A.E.R. 615, and in the remarks of MURRAY, J., in *Griessel's* case, *supra* at p. 478 quoted above.

In seeking to discharge this *onus* defendant pins his faith to two factors. The first is that an analysis of a portion of deceased's brain showed that it contained .22 per cent by weight of ethyl alcohol. The second point is that the accident is explicable, so it was contended, only on the basis that the deceased's faculties, physical or mental, or his judgment, must have been impaired at the time it occurred.

[The learned Judge then dealt with the evidence on this issue and proceeded.]

The conclusion to which I come is that up to some ten minutes or so before his death deceased did not exhibit the signs of intoxication which one in all probability could have expected of a person such as the deceased if he had a brain tissue content of .22 ethyl alcohol. There is accordingly a decided and unresolved conflict between the evidence adduced in regard to deceased's condition and the result of the test.

With regard to this conflict Dr. Turner held the view that if the witnesses who had seen the deceased during the evening before he met his death could be relied on as being truthful and accurate in their observations when they said they saw no signs of him being under the influence of liquor, then the results of the analysis must be wrong. This witnesses laid great stress in the determination of intoxication upon the importance of visible signs of such a condition:

"For all practical purposes you cannot have intoxication unless you have signs readily detectible"

he said. Under cross-examination he conceded that in the light of the over-all picture drawn by the witnesses who saw the deceased on the night on which he met his death, the latter would appear to have been generally more sober than drunk. It is for this reason that he arrived at his opinion that the results of the analysis must be incorrect if the picture drawn by these witnesses were truthful and accurate. It is not necessary for me to go as far as to accept his conclusion in this regard. Suffice to say that the party upon whom the *onus* rests to prove on a balance of probabilities that the deceased was intoxicated leaves this conflict unresolved. It is true that the general body of evidence is to the effect that the chances of the analysis being incorrect are remote. There are however two aspects of the evidence relative to the analysis which cannot entirely be overlooked. The analyst, Mr. Borcherds, who did the test, was not available to give evidence. He died since making the analysis. Nor could his notes of the analysis, his readings and calculations, be found. These notes are usually preserved by the analyst, but after his death when a search was made for them these could not be traced. Accordingly his findings were presented to the Court in a form of an affidavit made by him a few days after the analysis. In the result it was not possible to subject him to cross-examination as to the method adopted by him in the conduct of the analysis, or to test the accuracy of his calculations by reference to his notes. Very full evidence—the veracity of which I unhesitatingly accept—of the methods usually adopted by an analyst making these tests, and in fact usually adopted by Mr. Borcherds himself, was placed before the Court. These witnesses, as well as Dr. Turner, conceded that there was a possibility of the analysis producing an incorrect result. They all agreed in describing this possibility as remote, and I have no doubt it is. The fact remains, however, that it conflicts with what I have found to be truthful and largely reliable evidence of witnesses who saw the deceased on the night of the collision. That being so, I conclude that the defendant has failed to discharge the *onus* resting upon it of proving that the deceased was intoxicated on the night in question and that his death resulted directly or indirectly from that condition.

There must accordingly be judgment for plaintiff in the sum of £1,000, interest *a temporae morae* and costs of suit.

NOTES AND NEWS : BERIGTE

Dr. L. Staz, Ophthalmic Surgeon of Johannesburg, has resumed his practice on his return from Europe.

During his trip he attended the meetings of the Jules Gonin Club in Lausanne on the subject of *Detachment of the Retina* and visited the clinics of Professor Francois in Ghent and Professors Leonardi and Strampelli in Rome.

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Dr. Harold Bloch has joined Dr. Alan Price and Dr. Percy Reichman in their radiological practice at 401 Medical Arts Building, 220 Jeppe Street, Johannesburg, and their suburban branch at 1 Asklipion Medical Centre, Rosettenville, Johannesburg. (*Telephones*: — *Medical Arts Building*: 22-1735; *Asklipion Medical Centre*: 26-1169; *Residence*: 40-4416).

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IN MEMORIAM: DR. MORRIS GINSBURG

We deeply regret to record the death of Dr. Morris Ginsburg.

Dr. Ginsburg graduated as M.B., Ch.B., at the University of Cape Town in 1936 and obtained his M.D. at the University of Pretoria in 1951.

After an extensive experience in mental hospitals in South Africa, Dr. Ginsburg was appointed as Superintendent of Sterkfontein Hospital, Krugersdorp, Transvaal, a post which he held actively at the time of his unfortunate illness.

Dr. Morris Ginsburg

Dr. Ginsburg had recently returned from a lengthy visit overseas, where he made an intensive study of modern methods of psychiatric treatment. He also undertook a comprehensive study of comparative legislation affecting the practice of psychiatry.

He was at the time of his death an active member of a Blue Print Committee established by the South African National Council for Mental Health concerned with the forensic aspects of psychiatry.

FRANK FORMAN POST-GRADUATE AWARD

Applications for the 1962 Frank Forman Post-graduate Award must reach the Secretary, 3 Park Road, Rondebosch, Cape Town, before 30 November 1961.

* * *

Dr. Sidney Sacks, Orthopaedic Surgeon, Johannesburg, has been invited to open the discussion on *Anterior Fusion of the Spine* at the Meeting of the American Academy of Orthopaedic Surgeons in Chicago in January 1962.

* * *

Partnership available in a large and well-established practice in Durban to replace one doctor.

Write to 'ABC,' Medical Proceedings, P.O. Box 1010, Johannesburg.

* * *

Dr. J. H. S. Gear, Director of the South African Institute for Medical Research, left South Africa on 4 November 1961, to attend a conference in Washington on the use of measles vaccine. Dr. Gear will spend some time at the National Institutes of Health, Bethesda, after the conclusion of the conference.

* * *

THE SOUTH AFRICAN GERIATRIC SOCIETY

FIRST BIENNIAL GENERAL MEETING

This was held on 29 September 1961 at the University of Cape Town during the 43rd Congress of the South African Medical Association.

After Dr. J. H. Sheldon (*Great Britain*) had congratulated the founders on forming a Geriatric Society, he delivered a very interesting and informative address.

The Interim Convener, Dr. I. M. Hurwitz, then delivered a report on the activities of the Society since its formation and reported that the medical profession in South Africa appeared to be very interested.

Elections were held and the following committee was elected for the ensuing 2 years:

Dr. I. M. Hurwitz, *President.*

Dr. L. Blumberg, *Vice-President.*

Dr. S. C. Gavron (*Honorary Secretary and Treasurer*).

Drs. Helen Brown, J. D. Anderson, Rebecca Katz, N. Silber and I. Waynik.

Dr. J. H. Sheldon (*Great Britain*) was elected an Honorary Life Member of the Society.

* * *

MEDICAL GRADUATES ASSOCIATION

UNIVERSITY OF WITWATERSRAND: BURSARY FUND

The Council of the Medical Graduates Association of the University of Witwatersrand announces that the Alumni Bursary Fund will be available for the year 1962.

The Bursary (which was founded by the Alumni of the Medical Faculty) is intended to assist dependants of medical graduates of the University of Witwatersrand.

Conditions of the award of the Bursary are contained in the Calendar of the University and may also be obtained from the Secretary of the Association.

Applications (which should reach the undersigned not later than 31 December 1961) should be addressed to:

The Honorary Secretary,
Medical Graduates Association,
Medical School, Johannesburg.

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FACULTY OF MEDICINE: MEDICAL GRADUATES ASSOCIATION

POST-GRADUATE REFRESHER COURSE

The Summer Post-Graduate Refresher Course has been arranged for the period 15 to 20 January 1962. Applications should be made to the Medical Graduates Association, Medical School, Johannesburg.

The Course will include Paediatrics, Anaesthetics, Dermatology and Orthopaedics in addition to General Medicine, Surgery and Obstetrics and Gynaecology.

As the number of post-graduates participating is strictly limited early application is essential. Closing date for applications is 1 December 1961.

The fee for the Course is R 10.00 payable in advance to the Secretary, Medical Graduates Association, Medical School, Johannesburg.

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BURN HAZARDS IN THE HOME

The home continues to be the most dangerous place for burn accidents and, if anything, the hazards are greater than in the past.

Thus the need for preventive measures was never greater, according to an article in *What's New*, Abbott Laboratories publication to the medical profession. Four fifths of all burn accidents occur in the home.

The split-level house, for all its conveniences, is sometimes so laid out that a fire which starts in the kitchen can be in the bedrooms in a few minutes.

'The peninsula cooking unit is open to approach of little children on 3 sides, instead of one where the stove is against the wall between cabinets,' the article says. 'The problem may be complicated by the new oven in the wall where there is no counter space on either side to place a hot roaster when the mother removes it from the oven. If she must turn about and walk, the risk is enhanced to the unseen toddler who appears suddenly behind her.'

The abundance of electrical appliances increases the danger when electrical wiring is defective or inadequate. Also, in many new houses wall space is conserved in some rooms by placing windows high off the floor, or open-cut casement windows are too small to allow escape in case fire blocks other exits. This applies particularly to older people.

'In the new ranch homes in warmer climates the attached garage opens into the kitchen or family room, and the laundry is in the garage. Open flames in gas water heaters and dryers restrict many of the articles that could be stored in a garage that is used only for the family's car.'

Electric power tools and the power lawnmower, also often stored in the garage of a basementless house, offer other hazards to the home owner.

Other comforts of modern living must be used with care. 'Cigarette lighters have caused severe or fatal burns when lighted in the presence of fumes. A leaking lighter in the shirt pocket may suddenly ignite the clothing when removed and thumbed to light a cigarette. And, of course, children love lighters.'

In 1959 in the United States 70,000 persons required hospitalization for burns and 11,300 of them died. Almost a million had burns serious enough to require medical attention, the vast majority caused by ignorance, carelessness or childhood impulses. In the decade (1940-49) 80,000 persons died from burns in the United States.

INFECTION OF BURNS

Bacterial infection is posing a major threat in the management of severe burns, according to an article in *What's New*, Abbott Laboratories publication to the medical profession. It reports an increasing incidence throughout the world of pseudomonal septicaemia.

No antibiotic or other drug has been effective against it, and it has been almost invariably fatal. 'Thus a big and unanswered problem is the susceptibility of burn patients to invasion of bacteria relatively low in virulence.'

The incidence of wound infection is not increasing, but 'more infections occur because more patients' lives are prolonged.' Another puzzling problem is the frequency of urinary tract infections in extensive burn cases.

Antibiotic therapy has limited uses because of the 'current incidence of resistant strains of microorganisms.' In general, massive doses of antibiotics are recommended in the first 3 post-burn days, then discontinuance of use until about the twelfth day, when 'there is somewhat less likelihood of the presence of resistant organisms.'

Additional evidence indicates that bacteria may propagate more rapidly when a wound is covered than when it is exposed.

Despite problems, there is hope 'for an occasional survival among patients with extensive deep burns and perhaps survival of nearly all of those with less than 50 per cent burns.'

Some of the reasons lie in the use of fluid therapy, which in the last 20 years has decreased mortality in moderate burns and prolonged survival time in extensive burns. Between 1948 and 1957, e.g. shock deaths following burns were reduced to 1% at Massachusetts General Hospital, while in the preceding 8 years, shock had been responsible for 19% of burn deaths. Skilful management of antibiotics, gamma globulin, and steroids, better physiotherapy, better training and education of physicians in treatment of burns, and greater research into the many complications of burns, can all lead to improved therapy. There is even hope that antitoxins can be developed.

However, two observers are quoted to the effect

that ' in general no injury is handled less expertly by the medical profession at large than a burn,' and while . . . ' the number of well-organized research and teaching burn centres is increasing, there is immediate need for more in both civilian and military management . . .

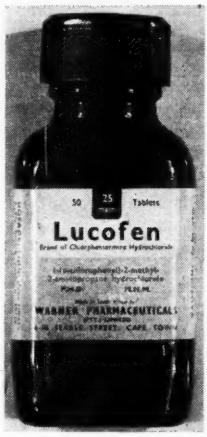
' The urgency of solving burn problems is heightened by the possibility of nuclear warfare,' since it has been estimated that ' thermal injuries will constitute a large proportion of all injuries . . . and these will require essentially the same care given burn wounds in day-to-day practice.'

PREPARATIONS AND APPLIANCES

LUCOFEN TABLETS

FOR THE TREATMENT OF OBESITY

A new approach to the treatment of obesity is afforded by **Lucofen,** which promotes a feeling of satiety earlier than usual at meal times, whilst initial appetite is not affected.



Lucofen (chlorphentermine) or 1(p-chlorophenyl) 2-methyl-2-aminopropane hydrochloride, is a substance with practically no central stimulating effect and no significant sympathomimetic or pressor effect. Patients are calm and cooperate in dietary control. Weight loss is gradual, being 1 lb. to 1½ lb. per week.

Safe for pregnant patients and cardiacs, **Lucofen** has not been shown to cause any measure of addiction or any type of mental disturbance.

Side Effects: Occasional dryness of the mouth and dyspepsia.

Dose: 1 tablet *t.i.d.* with meals.

Presentation: Bottles of 50 tablets, Sugar-coated, white, P.H.D.

Manufactured by: Warner Pharmaceuticals (Pty.) Ltd., 6-10 Searle Street, Cape Town. *Telephone:* 41-1725.

DIASTAT 500 AND DIASTAT 250

FOR DIARRHOEA, DYSENTRY, ENTERITIS

Ingredients: Highest Streptomycin Content:

Diastat '500' contains 500 mg. streptomycin per tablespoonful.

Diastat '250' contains 250 mg. streptomycin per tablespoonful.

Phthalyl Sulphathiozole: the sulpha of choice for diarrhoea and dysentry. (Least absorbed and '8 times as effective as sulphaguanidine'—*Martindale*).

These are combined with adsorbent, antispasmodic, analgesic and binding agents in a pleasantly flavoured vehicle.

Public Prices:

Diastat '250' 2 oz., retails 75 cents.
Diastat '250' 4 oz., retails R1.25.
Diastat '500' 2 oz., retails R1.00.
Diastat '500' 4 oz., retails R1.65.

Diastat '250' is identical in ingredients and strength with **Diastat** '500' apart from the streptomycin content.

Dosage: Adults. One tablespoonful every 4 hours.

Children. One to two teaspoonful every 4 hours.

Infants. Half to one teaspoonful every 4 hours.

Free medical samples will be supplied gladly on request.

Manufactured by: Petroy Pharmaceuticals (Pty.) Limited, 32 Bok Street, Joubert Park, Johannesburg, P.O. Box 3619, Johannesburg. (*Telephones:* 44-3185; 44-3346; 44-3271).

PARACETACOD TABLETS

AN EFFECTIVE, SAFE ANALGESIC

Indications: Wherever a most effective, safe and rapid acting analgesic is required.

Wherever Aspirin is contra-indicated, particularly where the patient is on anti-coagulant therapy, or where the patient may suffer gastro-intestinal blood loss.

References: 'Our experience suggests that salicylates and their compounds are contra-indicated in patients on anticoagulant therapy, and such patients should be warned not to take Aspirin or its many proprietary analogues . . . Such patients should preferably be treated with some form of paracetamol which, so far as is known, does not exert any adverse effect upon prothrombin levels'. (Rossiter, Lewis and Glazer—*British Medical Journal*, 7 May 1960, p. 1426).

'*Drug Induced Gastro-Intestinal Bleeding.* Consumption of Aspirin is an important cause of gastro-duodenal bleeding and makes an appreciable contribution to the number of hospital admissions on account of haematemesis and melaena.' (The *Lancet*, 26 August 1961, p. 1471).

Paracetacod *Tablets:*

Acetyl paraaminophenol (paracetamol).	.. 7½ grains.
Codein Phosphate	.. 1:6 grain.
Ascorbic Acid	.. 50 mg.

in a rapid disintegration base

Paracetacod is not PHD or HFD. Contains no Aspirin or other irritants.

Dosage. One or two tablets every 4 hours.

Prices:

20 tablets retail at 63 cents.
100 tablets retail at R2.25.

Free medical samples will be supplied gladly on request.

Manufactured by: Petroy Pharmaceuticals (Pty.) Ltd., 32 Bok Street, Joubert Park, Johannesburg, P.O. Box 3619, Johannesburg. (*Telephones:* 44-3346; 44-3185; 44-3271).

REVIEWS OF BOOKS

PSYCHOTHERAPY

Persuasion and Healing: A Comparative Study of Psychotherapy. By Jerome D. Frank, M.D., Ph.D. (1961. Pp. 274 + Index. R 3.50).
London and Cape Town: Oxford University Press.

Professor Frank has outlined in a concise, practical and readable book, the American psychotherapeutic scene. He emphasizes the features these diverse methods share not only with one another but also with other forms of persuasion and healing.

Psychotherapy is viewed as an influencing process with emotional, cognitive and behavioural facets. Individual and group methods are discussed and they are further classified as directive or evocative.

A research study of psychotherapy with outpatients using group and individual forms of evocative therapy and minimal treatment is reported. The results lend weight to the view that psychotherapy produces 2 distinguishable but related types of effect, viz. relief of distress and improvement in personal functioning. It appears that symptom relief results primarily from the patient's expectation of help, occurs rapidly and is not related to any one particular type of therapy. The second type of improvement takes longer and does appear to be related to the type of therapeutic experience.

The author stresses the use for research in the field of psychotherapy and outlines some of the difficulties encountered. One of the greatest of these is the emotional involvement of the therapists in the efficacy of their methods. He states that many of the most sophisticated and experienced psychotherapists are unwilling to submit their work to this sort of systematic impartial scrutiny. He refers to observation through a one-way screen or tape-recording. Not all the difficulties, however, come from the therapist; the patient and the method of treatment are also responsible for problems in conducting research.

This review also emphasizes the usefulness of group forces to produce and sustain therapeutic change. This implies not only group psychotherapy, but also full use of all the resources in the patient's environment.

Amongst the most original and entertaining contents of this book are the appropriate quotations from Alice in Wonderland at the commencement of each Chapter.

SUBNORMAL VISION

Correction of Subnormal Vision. By Norman Bier, F.B.O.A. (Hons.), F.A.A.O., D.Orth. (1960. Pp. 231 + Index. With 133 Figs. R 5.20).
Durban: Butterworth and Co. (Africa) Limited.

Although directed chiefly to the optician, this book contains very useful information, which can be digested with great benefit, especially by the student ophthalmologist interested in visual aids for patients who cannot be helped with conventional methods of treatment.

The first 2 chapters deal with (British) legislation regarding blindness, and it is gratifying to notice that attention is drawn to the often slight difference between the registered blind and the unregistered.

The later chapters describe, in broad outline, the different types of modern visual aids and their application to particular problems. Every one dealing with the partially sighted is familiar with the patient who needs a great deal of sympathy, patience and personal effort before deriving benefit from any kind of aid, and how a strong incentive for rehabilitation is essential in order to produce improvement in vision.

Although not a catalogue, this book describes many different types of lenses. The concluding chapter on *Case Reports* indicates the use of particular lenses in different conditions, while the 3 preceding chapters cover the author's recommended *Clinical Procedure* (which relates to the examination, to visual re-education and rehabilitation) and stresses the fact that attention must be focused on the patient's abilities, however slight, rather than on his weakness and handicap. Understanding of these problems goes a long way towards rehabilitating the partially sighted and offering them a new place in every-day life.

NURSING EDUCATION

Basic Nursing Education Programmes: A Guide to their Planning. Katherine Lyman. World Health Organization: Public Health Papers, No. 7, 1961, 81 pages. R 0.50.
Pretoria: Van Schaik's Bookstore (Pty.), Ltd., P.O. Box 724.

In this latest issue in WHO's *Public Health Papers* series the knowledge and experience of a number of nurses—in national and international organizations and on the WHO Expert Advisory Panel on Nursing—have been pooled to provide a guide to the preparation of basic nursing education programmes. This is the final draft of the guide, previous drafts having been sent to various parts of the world to be tried out in practice and having been altered to incorporate suggestions made for improvements. It is thus an authoritative document, which distils much international experience and has stood the test of experience in the field.

Any plan for the education of nurses must be based on local resources and needs and adapted to the community in which the nurses will work. The guide is therefore in two parts: the first outlining the general and specific information about a community upon which planning for nursing education is based and suggesting methods for collecting it; the second sketching the steps whereby a basic nursing education programme is developed. Planning for an individual programme is conditioned by the organization of nursing education in a country, so national planning receives consideration as well as planning for an individual school.